

**Notice of Allowability**

Application No.

10/776,634

Examiner

Natalia Figueroa

Applicant(s)

SATO ET AL.

Art Unit

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application (filed 12 February 2004).
2. ☒ The allowed claim(s) is/are 1-4.
3. ☒ The drawings filed on 12 February 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☒ None    of the:
  1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892) ✓
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 02/18/2004 ✓
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance ✓
9. ☐ Other \_\_\_\_\_.

### EXAMINER'S AMENDMENT AND REASONS FOR ALLOWANCE

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Steven M. Rabin (Reg. No. 23,102) on May 18, 2005.

The application has been amended as follows:

In page 3 of the specification; line 19, delete "position ?s and a detected position ?", replace with - position  $\rho_s$  and a detected head position  $\rho$  -.

In page 3, line 20, delete "head position ?s", replace with - head position  $\rho_s$  -.

In page 4, line 8, delete "radial position ?", replace with - radial position  $\rho$  -.

In page 4, line 10, delete "head position ? and the target head position ?s", replace with - head position  $\rho$  and the target head position  $\rho_s$  -.

In page 4, line 12, delete "target position ?s", replace with - target position  $\rho_s$  -.

In page 19, line 24, delete ">", replace with - . -.

In page 24, claim 2, line 23, delete "rotary positioners rotary positioners".

***Information Disclosure Statement***

2. The information disclosure statement (IDS) submitted on 18 February 2004 (02/18/2004) is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

***Allowable Subject Matter***

3. Claims 1-4 are allowed.

4. The following is an examiner's statement of reasons for allowance:

RE claims 1 and 3, the prior art of record, and in particular Sato et al (US Pub. No. 2005/0073762), fails to teach or suggest an apparatus comprising a plurality of rotary positioners including first and second write-dedicated rotary positioners, and a checking- dedicated rotary positioner, the first write-dedicated rotary positioner having a first read magnetic head and a plurality of first write magnetic heads, the first read magnetic head reading out the magnetic data on the master disk, the first write magnetic heads including a first write magnet head corresponding to each object magnetic disk surface of the object magnetic disks stacked on the shaft of the spindle motor for accessing said each object magnet surface, the second write-dedicated rotary positioner having a second read magnetic head and a plurality of second write magnetic heads, the second read magnetic head reading out the magnetic data on the master disk, the second write magnetic heads including a second write magnet head corresponding to each object magnetic disk surface of the object magnetic disks stacked on the shaft of the spindle motor for accessing said each object magnet surface, wherein each of the first write magnetic heads writes the magnetic data that is read out by the read magnetic head disposed on the master

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magnetic disk or magnetic data made from the magnetic data that is read out from the master disk (hereinafter the two types of magnetic data are collectively referred to as embedded data) onto said each first object magnet surface of the object magnetic disk to which the first write magnetic head corresponds, in such a way that the second write magnetic head corresponding to the same surface of the object magnetic disk and writes the embedded data in parallel while sharing a range of tracks, the plurality of rotary positioners further including a checking-dedicated rotary positioner stacking and holding integrally and pivotally a first type checking head and second type checking heads, the first type checking head reading out the magnetic data on the master disk for checking, and each of the second type checking heads being provided corresponding to one surface of the object magnetic disks for checking and reading out the embedded data corresponding to the magnetic data that is read out from the master disk by the first type checking head; and respective comparison means, corresponding to each surface of the object magnetic disks for comparing the embedded data read out from the surface of the object magnetic disk by the second type checking head with the magnetic data that is read out by the first type checking head simultaneously with writing operations of the first and second write magnetic heads.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following documents are cited to further show the state of the art with respect to writing magnetic data.

a) Baker et al (USPN 6,704,156): Discloses writing of servo patterns in a disk drive.


b) Yamazaki et al (US Pub. No. 2003/0137765): Discloses an information recording and reproducing system.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Natalia Figueroa whose telephone number is (571) 272-7554. The examiner can normally be reached on Monday - Thursday 8:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
NFM

  
**DAVID HUDSPETH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600**